

Mr. Collett
Wabash Valley Asphalt Company, LLC
P.O. Box 8297
Terre Haute, Indiana 47808

Re: 153-14256
First Significant Revision to
FESOP 153-6044-03274

Dear Mr. Collett:

Wabash Valley Asphalt Company, LLC) was issued a permit on May 22, 1997 for a portable hot mix asphalt plant. A letter requesting changes to this permit was received on April 11, 2001. Pursuant to the provisions of 326 IAC 2-8-11.1 a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of allowing re-refined waste oil to be burned in the existing dryer burner.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged

and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Mike Pring, ERG, P.O. Box 2010, Morrisville, North Carolina 27560, or call (919) 468-7840 to speak directly to Mr. Pring. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/MP

cc: File - Sullivan County
U.S. EPA, Region V
Sullivan County Health Department
Air Compliance Section Inspector - Marc Goldman
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

Wabash Valley Asphalt Company, Inc. (Portable Source)

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F153-6044-03274	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 22, 1997

First Administrative Amendment: AAF 167-9413-03274, issued 2/19/98
Second Administrative Amendment: AAF 167-11138-03274, issued 8/4/99
Portable Source Relocation: No. 153-12003-03274, issued March 31, 2000

Significant Permit Revision: SPR 153-14256-03274 Pages affected: 4, 21, 23, 28	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 23, 2001

SECTION A

SOURCE SUMMARY

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a portable hot drum-mix asphalt plant with a maximum capacity of 320 tons per hour.

Authorized individual:	James L. Burdick
Source Address:	3578 State Road 59 North, Brazil, Indiana 47834
Mailing Address:	P.O. Box 8297, Terre Haute, Indiana 47808-8297
SIC Code:	3531
Source Location Status:	Sullivan
County Status:	Minor Source, PSD and Emission Offset Rules; Minor Source, Part 70 Permit Program

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This portable source consists of the following emission units and pollution control devices:

- (a) One (1) hot oil heater, fired by #2 distillate fuel oil and rated at 2.54 million British thermal units per hour. The heater exhausts at stack SV2B.
- (b) One (1) 20,000 gallon liquid asphalt storage tanks for AC-20.
- (c) One (1) 10,000 gallon tank for burner fuel #2 fuel oil storage.
- (d) One (1) baghouse with a total filter area of 7550 ft².
- (e) One (1) 320 ton per hour drum-mix dryer.
- (f) One (1) 97 million British thermal units per hour burner fired by #2 distillate fuel oil, or re-refined waste oil.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (a) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (b) A laboratory as defined in 326 IAC 2-7-1(20)(C).

A.4 FESOP Applicability [326 IAC 2-8-2]

This portable source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions Superseded [326 IAC 2]

This permit supersedes the conditions of all construction and operating permits issued under 326 IAC 2 prior to the effective date of this permit.

SECTION D.1

FACILITY OPERATION CONDITIONS

- (1) One (1) aggregate dryer with a maximum capacity of 97 million British thermal units per hour exhausting through a baghouse at stack SV1, fired by #2 or re-refined waste oil.
- (2) One (1) hot oil heater, fired by #2 distillate fuel oil and rated at 2.54 million British thermal units per hour. The heater exhausts at stack SV2B.
- (3) One (1) baghouse with a total filter area of 7550 ft².
- (4) One (1) 320 ton per hour drum-mixer exhausting through a baghouse at stack SV1.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the combustion of distillate (#2) oil shall be limited to 0.5 pounds per million BTU heat input (the equivalent of 0.482 percent sulfur content), and sulfur dioxide emissions from the combustion of re-refined waste (residual) oil shall be limited to 1.6 pounds per million BTU heat input (the equivalent of 1.31 percent sulfur content).

D.1.2 Sulfur Dioxide (SO₂)

The total usage of #2 fuel oil shall be limited to 2,523,400 gallons (or fuel oil equivalent) per year based on a fixed monthly basis. For each gallon of re-refined waste oil burned in the dryer, the limit shall be reduced by 1.61 gallons. This fuel usage limitation was taken voluntarily by the company and is equivalent to sulfur dioxide emissions of 89 tons year. Due to this limit, the Emission Offset (326 IAC 2-3) and Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) rules do not apply.

Month	#2 Fuel Oil Usage equivalents (gallons/month)
January	20,000
February	50,000
March	100,000
April	250,000
May	250,000
June	275,000
July	280,000
August	280,000
September	280,000
October	270,000
November	250,000
December	218,400

D.1.3 Particulate Matter (PM)

- (a) That pursuant to 326 IAC 6-1-2, particulate matter emissions from the asphalt plant shall not exceed 0.030 grains per dry standard cubic foot (gr/dscf) and that visible emissions from the plant shall not exceed 20 percent opacity. Compliance with these limits will satisfy the New Source performance Standards, 326 IAC 12 (40 CFR 60.90 to 60.93, Subpart I). Compliance with these limits will also satisfy 326 IAC 5-1 and 326 IAC 6-1-2.

- (b) Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60.93, Subpart I), particulate matter emissions from the asphalt plant shall not exceed 0.040 grains per dry standard cubic foot (gr/dscf).

D.1.4 Particulate Matter 10 Microns (PM-10)

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns emissions from the aggregate dryer/mixer shall not exceed 17.15 pounds per hour, including both filterable and condensible fractions. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

Testing Requirements [326 IAC 2-8-4(3)]

D.1.5 Performance Testing

That during the period between 540 days and 720 days after issuance of this permit, the Permittee shall perform PM and PM10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5, 17, 40 CFR Part 51 Appendix M, Method 201, 201a, 202, as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. PM10 includes filterable and condensible PM10. All testing shall be performed according to the provisions of 326 IAC 3-2.1 (Source Sampling Procedures).

A test protocol shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

at least thirty-five (35) days before the intended test date. The Permittee shall develop and submit for approval with the protocol, standard operating procedures to be followed during sampling, handling, analysis, quality control, quality assurance, and data reporting.

Compliance Assurance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.6 Daily Monitoring of Baghouse Operational Parameters

That the baghouse shall be operated at all times when the aggregate dryer is in operation. The Permittee shall monitor the following parameters once per shift:

- (a) The Permittee shall take readings of the total static pressure drop across all baghouses controlling this operation, at least once per day when the mixing and drying process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective action for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Condition C.11 - Pressure Gauge Specifications, be subject to approval by IDEM, OAQ, and be calibrated at least once every six (6) months.

(b) Inlet temperature to the baghouse

The inlet temperature to the baghouse shall be maintained within a range of 200NF - 400NF to prevent overheating of the bags and to prevent low temperatures from mudding up the bags.

The operational parameters shall be monitored for indications of bag failure. The thermocouple at the inlet has a temperature switch which automatically shuts the burner off if the high end range is exceeded.

In the event that bag failure has occurred due to rupture, melting, etc., corrective action shall be taken. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading. The baghouse shall shutdown for visual inspection within 24 hours and bags shall be replaced as needed.

D.1.7 Daily Visible Emissions Notations

Visible emission notations of the conveyers, material transfers, aggregate storage piles, and the mixing and drying operation stack exhaust shall be performed once per working shift. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shutdown time. In the case of batch or discontinuous operations, reading shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.8 Operational Parameters

The Permittee shall maintain monthly records at the stationary source of the following values:

- (a) Amount and type of each fuel oil used;
- (b) Average sulfur content of each fuel oil used;
- (c) Average higher heating value of each fuel oil used;
- (d) Average sulfur dioxide emission rate (expressed in pounds per million BTU for each fuel oil).

D.1.9 Quarterly Reporting

Quarterly summary to document compliance with operation conditions number D.1.2 shall be submitted, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported. These reports shall include the number of gallons of each type of fuel used, the fuel oil's average sulfur content, and the 12 month rolling total gallons of fuel oil used, for each month in a quarter. All records and reports shall use calendar month averages. Records of sulfur content and higher heating value shall be determined by information as obtained by the vendor.

D.1.10 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

D.1.11 Fuel Oil Sampling and Analysis

Oil samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted. The Permittee shall analyze the oil sample to determine the sulfur content of the oil in accordance with 326 IAC 3-3-4. If a partially empty fuel tank is refilled, a new sample and analysis is required upon filling. Vendor analysis of each load delivered is acceptable, in lieu of the above, if accompanied by a certification.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Report of Monthly Limits

Source Name: Wabash Valley Asphalt
Location: Sullivan County
Permit No.: F153-6044-03274

Month: _____ Year: _____

Month	Fuel Usage Limit* (gals/month)	Actual Fuel Usage (gals/month)	Sulfur Content (percent)	Heating Value (MMBtu/hr)
January	20,000			
February	50,000			
March	100,000			
April	250,000			
May	250,000			
June	275,000			
July	280,000			
August	280,000			
September	280,000			
October	270,000			
November	250,000			
December	218,400			

* #2 Fuel Oil equivalents. Each gallon of re-refined waste oil burned in the dryer is equivalent to 1.61 gallons of #2 fuel oil.

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	Wabash Valley Asphalt Company, LLC
Source Location:	937 S. Section Street, Sullivan, Indiana 47882
County:	Sullivan
SIC Code:	2951
Operation Permit No.:	153-6044-03274
Operation Permit Issuance Date:	May 22, 1997
Permit Revision No.:	153-14256-03274
Permit Reviewer:	ERG/MP

The Office of Air Quality (OAQ) has reviewed a revision application from Wabash Valley Asphalt Company, LLC relating to the operation of one (1) 97 million British Thermal Units per hour (MMBtu) burner fired by #2 distillate fuel oil. This permit will allow Wabash Valley Asphalt Company, LLC to burn re-refined waste oil in the existing burner.

History

On April 11, 2001, Wabash Valley Asphalt Company, LLC submitted an application to the OAQ requesting to fire re-refined waste oil in their existing dryer. Wabash Valley Asphalt Company, LLC was issued a FESOP on May 22, 1997.

Existing Approvals

The source was issued a FESOP (F021-6044-03274) on May 22, 1997. The source has since received the following:

- (a) First Administrative Amendment: AAF 167-9413-03274, issued February 19, 1998.
- (b) Second Administrative Amendment: AAF 167-11138-03274, issued August 4, 1999.
- (c) Portable Source Relocation: L 153-12003-03274, issued March 31, 2000

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
SV1	Dryer Burner	35	2.2	54,000	275

Recommendation

The staff recommends to the Commissioner that the Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 11, 2001. Additional information was received on April 27, 2001 and May 29, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (page 1).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	195.6
PM-10	155.9
SO ₂	449.3
VOC	3.1
CO	15.3
NO _x	58.1
Lead	1.68

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
All HAPs	negligible
TOTAL	negligible

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of SO₂ are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

The source has agreed to limit SO₂ emissions by limiting fuel oil consumption. Therefore, rule 326 IAC 2-8 will apply.

- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Potential to Emit (tons/year)						
Process/facility	PM*	PM-10**	SO ₂	VOC	CO	NO _x	HAPs
Dryer - re-refined waste oil	42.38	75.1	89	3.1	15.3	58.1	NA
Total Emissions	42.38	75.1	89	3.1	15.3	58.1	NA

*Limited to 0.03 gr/dscf.

**Limited to 17.15 pounds per hour.

County Attainment Status

The source is located in Sullivan County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Sullivan County has been designated as attainment or unclassifiable for ozone.

Portable Source

- (a) Initial Location
 This is a portable source and its initial location is 3578 State Road 59 North, Brazil, Indiana 47834.
- (b) PSD and Emission Offset Requirements
 The emissions from this portable source were reviewed under the requirements of the Prevention of Significant Deterioration (PSD), 326 IAC 2-2, 40 CFR 52.21, and Emission Offset, 326 IAC 2-3.
- (c) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed sources under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) The existing hot mix asphalt plant is currently subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.90 through 60.93, Subpart I. This rule requires the particulate emissions may not:
- (1) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf), and
 - (2) Exhibit 20 percent opacity, or greater.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63 applicable to this source.

State Rule Applicability

326 IAC 2-8-4 (Federally Enforceable State Operating Permit)

Pursuant to 326 IAC 2-8-4 (Federally Enforceable State Operating Permit), the source has taken limitations that limit the source's capacity to emit any air pollutants such that it does not fall within any of the categories listed in 326 IAC 2-7-2(a). Specifically, the source has been limited to 2,523,400 gallons of #2 fuel oil per year (which equates to 89 tons per year of SO₂), with this amount allocated to each month of the year per existing permit condition D.1.2.

This significant permit revision is intended to allow the source to burn re-refined waste oil in the dryer unit. As such, for every gallon of re-refined waste oil burned, the #2 fuel oil limit shall be reduced by 1.61 gallons (based on an SO₂ emissions ratio of 110.3 lb SO₂ per thousand gallons re-refined waste oil to 68.44 lb SO₂ per thousand gallons #2 fuel oil). The source shall keep monthly records of the amount and type of each fuel oil burned, and shall report these values on a quarterly basis, rolled on a monthly average, using the revised quarterly report found on page 28 of the existing permit.

326 IAC 6-1-2(a) (Particulate Emission Limitations; General Sources)

Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations; General Sources), particulate matter emissions from the asphalt plant shall not exceed 0.030 grains per dry standard cubic foot (gr/dscf).

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the combustion of re-refined waste (residual) oil shall not exceed 1.6 pounds per million Btu (lb/MMBtu) heat input [the equivalent of 1.31% sulfur content at a higher heating value of 120 million Btu per gallon (MMBtu/gal)].

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The dryer stack has applicable compliance monitoring conditions as specified below:
 - (a) The Permittee shall take readings of the total static pressure drop across all

baghouses controlling this operation, at least once per day when the mixing and drying process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective action for when the pressure reading is outside of the above mentioned range for any one reading.

- (b) Visible emission notations of the conveyers, material transfers, aggregate storage piles, and the mixing and drying operation stack exhaust shall be performed once per working shift. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80 percent of the time the process is in operation, not counting startup or shutdown time. In the case of batch or discontinuous operations, reading shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

These monitoring conditions are necessary because the baghouse for the hot mix asphalt process must operate properly to ensure compliance with 326 IAC 2-7 (Part 70).

Proposed Changes

- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
This portable source consists of the following emission units and pollution control devices:

- (a) One (1) hot oil heater, fired by #2 distillate fuel oil and rated at 2.54 million British thermal units per hour. The heater exhausts at stack SV2B.
- (b) One (1) 20,000 gallon liquid asphalt storage tanks for AC-20.
- (c) One (1) 10,000 gallon tank for burner fuel #2 fuel oil storage.
- (d) One (1) baghouse with a total filter area of 7550 ft².
- (e) One (1) 320 ton per hour drum-mix dryer.
- (f) One (1) 97 million British thermal units per hour burner fired by #2 distillate fuel oil, **or re-refined waste oil.**

SECTION D.1

FACILITY OPERATION CONDITIONS

- (1) One (1) aggregate dryer with a maximum capacity of 97 million British thermal units per hour exhausting through a baghouse at stack SV1, fired by **#2 or re-refined waste oil**.
- (2) One (1) hot oil heater, fired by #2 distillate fuel oil and rated at 2.54 million British thermal units per hour. The heater exhausts at stack SV2B.
- (3) One (1) baghouse with a total filter area of 7550 ft².
- (4) One (1) 320 ton per hour drum-mixer exhausting through a baghouse at stack SV1.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the combustion of distillate (#2) oil shall be limited to 0.5 pounds per million BTU heat input (the equivalent of 0.482 percent sulfur content), **and sulfur dioxide emissions from the combustion of (residual) re-refined waste oil shall be limited to 1.6 pounds per million BTU heat input (the equivalent of 1.31 percent sulfur content).**

D.1.2 Sulfur Dioxide (SO₂)

The total usage of #2 fuel oil shall be limited to 2,523,400 gallons (**or fuel oil equivalent**) per year based on a fixed monthly basis. **For each gallon of re-refined waste oil burned in the dryer, the limit shall be reduced by 1.61 gallons.** This fuel usage limitation was taken voluntarily by the company and is equivalent to sulfur dioxide emissions of 89 tons year. Due to this limit, the Emission Offset (326 IAC 2-3) and Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) rules do not apply.

Month	#2 Fuel Oil Usage equivalents (gallons/month)
January	20,000
February	50,000
March	100,000
April	250,000
May	250,000
June	275,000
July	280,000
August	280,000
September	280,000
October	270,000
November	250,000
December	218,400

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.8 Operational Parameters

The Permittee shall maintain monthly records at the stationary source of the following values:

- (a) Amount **and type** of **each** fuel oil used;
- (b) Average sulfur content of **the each** fuel oil used;
- (c) Average higher heating value of **the each** fuel oil used;

- (d) Average sulfur dioxide emission rate (expressed in pounds per million BTU **for each fuel oil**).

D.1.9 Quarterly Reporting

Quarterly summary to document compliance with operation conditions number D.1.2 shall be submitted, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported. These reports shall include the number of gallons of **each type of** fuel used, the fuel oil's average sulfur content, and the 12 month rolling total gallons of fuel oil used, for each month in a quarter. All records and reports shall use calendar month averages. Records of sulfur content and higher heating value shall be determined by information as obtained by the vendor.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT QUALITY
COMPLIANCE DATA SECTION**

Report of Monthly Limits

Source Name: Wabash Valley Asphalt
Location: ~~Clay~~ Sullivan County
Permit No.: ~~F024~~ F153-6044-03274

Month: _____ Year: _____

Month	Fuel Usage Limit* (gals/month)	Actual Fuel Usage (gals/month)	Sulfur Content (percent)	Heating Value (MMBtu/hr)
January	20,000			
February	50,000			
March	100,000			
April	250,000			
May	250,000			
June	275,000			
July	280,000			
August	280,000			
September	280,000			
October	270,000			
November	250,000			
December	218,400			

* #2 Fuel Oil equivalents. Each gallon of re-refined waste oil burned in the dryer is equivalent to 1.61 gallons of #2 fuel oil.

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

Conclusion

This permit revision shall be subject to the conditions of the attached proposed FESOP Permit No. 153-14256-03274.

Appendix A: Emissions Calculations

Waste Oil Combustion

Small Boiler

Company Name: Wabash Valley Asphalt
Address City IN Zip: 937 S. Section Street, Terre Haute, IN
SPR: 167-14256
Plt ID: 03274
Reviewer: ERG/MP
Date: 5/21/01

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

A = Weight % Ash = 1
L = Weight % Lead = 0.01
S = Weight % Sulfur = 1

97

6113.09353

Pollutant

	PM*	PM10*	SO2	NOx	TOC	CO	Pb
Emission Factor in lb/kgal	64.0 (64A)	51.00 (51A)	147.0 (147S)	19.0	1.0	5.0	0.5500 (55L)
Potential Emission in tons/yr	195.6	155.9	449.3	58.1	3.1	15.3	1.6811

*No information was given in AP-42 regarding whether the PM/PM10 emission factors included filterable and condensable PM.

Methodology

Emission Factor Units are lb/1000 gal

A = weight% ash in fuel, L = weight% lead in fuel, S = weight % sulfur in fuel

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.139 MM Btu

Emission Factors from AP-42, Chapter 1.11, SCC 1-03-013-02 (Supplement B 10/96)

Emission (tons/yr) = Throughput kgals per year x Emission Factor (lb/kgal)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs calculations

**Appendix A: Emissions Calculations
Waste Oil Combustion**

Page 2 of 2 TSD App A

Small Boiler

HAPs Calculations

Company Name: Wabash Valley Asphalt
Address City IN Zip: 937 S. Section Street, Terre Haute, IN
SPR: 167-14256
Plt ID: 03274
Reviewer: ERG/MP
Date: 5/21/01

Pollutant						
Emission Factor in lb/kgal	Arsenic 1.1E-01	Cadmium 9.3E-03	Chromium 2.0E-02	Manganese 6.8E-02	Nickel 1.1E-02	Cobalt 2.1E-04
Potential Emission in tons/yr	3.36E-01	2.84E-02	6.11E-02	2.08E-01	3.36E-02	6.42E-04

Methodology is the same as previous page.